Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented)   A medical diagnostic imaging system for acquiring images of a patient, coupled to a hospital network, which includes a hospital database and a plurality of hospital computers, the system comprising:

a means for controlling the imaging system, which controlling means is coupled to the imaging system and the hospital network and includes:

a display,

an applications database which is configurable by a user, and

an interface means for displaying interactive user interface screens

on the display, which user interface screens allow the user to configure

the applications database and interactively control the imaging system by

at least activating icons and buttons displayed thereon.

2. (Previously Presented)   The system as set forth in claim 1, wherein the interface means includes:

a protocol configuration means for configuring optimal examination protocols in response to receiving optimization parameters entered by the user into at least data entry fields displayed on the user interface screens.

3. (Previously Presented)   The system as set forth in claim 2, further including:

a protocol selection means for choosing examination protocols in response to receiving patient's limiting parameters entered by the user into data entry fields displayed on the user interface screens, and displaying the chosen examination protocols on the display from which the user selects a correct examination protocol.

4. (Previously Presented)   The system as set forth in claim 1, wherein the interface means includes:

a post-processing configuration means for configuring post-processing packages in response to receiving acquisition and post-processing parameters entered by the user into at least data entry fields displayed on the user interface screens.

5. (Previously Presented)   The system as set forth in claim 4, wherein the protocol selection means includes:

a post-processing means for automatically launching a correct post-processing package which matches patient's limiting parameters entered by the user into data entry fields.

6. (Previously Presented)   The system as set forth in claim 5, wherein the post-processing means generates post-processed images simultaneously as the images of the patient are acquired.

7. (Previously Presented)   The system as set forth in claim 6, wherein the post-processed images are automatically sent to a reviewing physician's hospital computer.

8. (Previously Presented)   The system as set forth in claim 4, wherein the post-processing configuration means includes:

a visualization configuration means for configuring visualization parameters in response to receiving acquisition and post-processing parameters entered by the user into the data entry fields.

9. (Previously Presented)   The system as set forth in claim 8, wherein the post-processing means includes:

a visualization means for automatically launching visualization parameters which match patient's limiting parameters entered by the user into data entry fields.

10. (Previously Presented)   The system as set forth in claim 1, further including:

a scanner for acquiring images of a patient; and

a protocol selection means for selecting examination protocols in response to receiving patient's limiting parameters entered by the user into data entry fields displayed on the user interface screens.

11. (Previously Presented)   The system as set forth in claim 10, wherein the interface means includes:

a parameters optimization means for automatically selecting optimization parameters based on the selected examination protocol to correct at least one of:

voltage supplied to the scanner,

amperage supplied to the scanner, and

a dose supplied to the patient.

12. (Previously Presented)   The system as set forth in claim 10, wherein the interface means includes:

a pre-fetch means for searching the hospital database for previous scans and examinations of the patient, wherein the previous scans and examinations are automatically sent to the physician's hospital computer.

13. (Original)   The system as set forth in claim 12, wherein the parameters and protocols of previous examinations are used in the step of selecting the examination protocol.

14. (Previously Presented)   The system as set forth in claim 12, wherein the previous scans have been generated at a different modality and the system utilizes an auto registration technique to display the previous and current scans at the physician's computer.

15. (Previously Presented)   The system as set forth in claim 10, wherein the interface means includes:

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a slab review means for merging image slices acquired by the scanner into slabs of selected thickness which is interactively supplied by the user.

16. (Previously Presented)   The system as set forth in claim 10, wherein the interface means includes:

a log means for automatically recording selected scanner's information including at least patient's information and scanner's running time into a digital log book.

17. (Previously Presented)   The system as set forth in claim 16, further including:

a remote statistics means for remotely accessing and mining the digital log book.

18. (Previously Presented)   The system as set forth in claim 10, further including:

a mobile protocol means for remotely specifying and loading examination protocols into the hospital database, wherein the interface means automatically uploads the examination protocols into the scanner.

19. (Previously Presented)   The system as set forth in claim 1, further including:
a measurement protocol configuration means for configuring measurement protocols, which means includes:

a measurement selection means for selecting a list of measurements to be performed for each measurement protocol; and

a reference image means for selecting a reference image which provides a visual indication of where each individual measurement is placed.

20. (Previously Presented)   The system as set forth in claim 19, further including:

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a measurement protocol means for selecting a correct measurement protocol in response to receiving patient's limiting parameters entered by the user into data entry fields displayed on the user interface screens;

a measurement calculating means for performing actual measurements; and

a measurement updating means for storing the actual measurements.

21. (Previously Presented)   The system as set forth in claim 1, wherein the interface means includes:

a workflow means for guiding the user through the imaging process which workflow means presents the user interface screens to the user in a subsequent order and prompts the user to enter data including at least patient's data, requested procedure and requesting physician.

22. (Previously Presented)   A method of optimizing a throughput of the diagnostic image processing system of claim 1.

23. (Cancelled)

24. (Cancelled)